PUBLIC HEALTH REGULATIONS

DEPARTMENT OF HEALTH

STATE OF HAWAII

CHAPTER 37-A

WATER QUALITY STANDARDS

Under and by virtue of the provisions of Chapter 342, Hawaii Revised Statutes, and the Federal Water Pollution Control Act Amendments of 1972, PL 92-500, and all other applicable laws, Chapter 37-A of the Public Health Regulations, Department of Health, State of Hawaii, is hereby amended to read as follows:

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Section 1. PURPOSE AND SCOPE

Pursuant to the authority granted by Chapter 342, Part III, Section 342-32, Hawaii Revised Statutes, the Director of Health of the State of Hawaii, appointed a Master to divide the waters of the State into areas and to recommend to the Director standards of water quality for such water areas. Except as modified in this Chapter, the standards recommended by the Master are hereby adopted. The standards adopted, hereinafter set forth, shall be the standards of water quality for the purposes of Chapter 37, Public Health Regulations, Department of Health, State of Hawaii, and shall be enforced and administered as provided therein.

Section 2. DEFINITIONS

- A. "Near shore waters" means all coastal waters lying within a defined reef area, all waters of a depth less than ten fathoms, or waters up to a distance of 1,000 feet off-shore if there in no defined reef area and if the depth is greater than ten fathoms.
- B. "Off-shore waters" means all coastal waters beyond the limits defined for "near shore waters."
- C. "Coastal waters" includes "near shore waters," "off-shore waters," and all waters that are subject to the ebb and flow of the tide.
- D. "Best available demonstrated pollution control technology" means that treatment or control necessary to achieve requirements established pursuant to statutes and regulations of the State of Hawaii and to the Federal Water Pollution Control Act, as amended.

A. Classification of Coastal Water Uses

Coastal waters are classified in accordance with the uses to be protected in each class as follows:

1. Class AA waters

The uses to be protected in this class of waters are oceanographic research, the support and propagation of shellfish and other marine life, conservation of coral reefs and wilderness areas, compatible recreation, and aesthetic enjoyment.

It is the objective of this class of waters that they remain in as nearly their natural, pristine state as possible with an absolute minimum of pollution from any source. To the extent possible, the wilderness character of such areas shall be protected. No zoncs of mixing will be permitted in these waters.

The classification of any water area as Class AA shall not preclude other uses of such waters compatible with these objectives and in conformance with the standards applicable to them.

2. Class A waters

The uses to be protected in this class of waters are recreational (including fishing, swimming, bathing, and other water-contact sports), aesthetic enjoyment, and the support and propagation of aquatic life.

It is the objective for this class of waters that their use for recreational purposes and aesthetic enjoyment not be limited in any way. Such waters shall be kept clean of any trash, solic materials or oils and shall not act as receiving waters for any effluent which has not received the best degree of treatment or control practicable under existing technology and compatible with the standards established for this class.

3. Class B waters

The uses to be protected in this class of waters are small boat harbors, commercial and industrial shipping, bait fishing, compatible recreation, the support and propagation of aquatic life, and aesthetic enjoyment.

It is the objective for this class of waters that discharges of any pollutant be controlled to the maximum degree possible and that sewage and industrial effluents receive the best degree of treatment control practicable under existing technology and compatible with the standards established for this class.

The Class B designation shall apply only to a limited area next to boat docking facilities in bays and harbors. The rest of the water area in such bay or harbor shall be Class Λ unless given some other specific designation in Section 5.

B. Classification of Fresh Water Uses

Fresh waters are classified in accordance with the uses to be protected as follows:

1. Class 1 waters

The uses to be protected in this class of waters are drinking water supply, food processing, the support and propagation of aquatic life, and compatible recreation.

It is the objective of this class of waters that they remain in as nearly their natural state as possible with an absolute minimum of pollution from any source. To the extent possible, the wilderness character of such areas shall be protected. Waste discharges into these waters are prohibited.

2. Class 2 waters

The uses to be protected in this class of waters are bathing, swimming, the support and propagation of aquatic life, comprible recreation, and agricultural and industrial water supply.

It is the objective for this class of waters that their use for recreational purposes, propagation of fish and other aq atic life, and agricultural and industrial water supply not be limited in any way. Such waters shall be kept clean of trash, solid materials or oils, and shall not act as receiving waters for any effluent which has not received the best degree of treatment or control practicable under existing technology and compatible with the standards established for this class.

Section 4. ZONES OF MIXING

Zones of mixing for the assimilation of municipal, agricultural, and ir ustrial discharges which have received the best degree of treatment or control practicable under existing technology are recognized as necessary.

It is the objective of this limited zone to provide for a current realistic means of control over such discharges and at the same time achieve the highest attainable level of water quality.

Section 5. CLASSIFICATION AND ESTABLISHMENT OF WATER AREAS

The following classification of water uses shall apply to the following areas:

A. Coastal Water Areas and Non-Tidal Brackish and Saline Surface Water Areas

(a) Class AA waters

Waimanalo Bay from Makapuu Point to the southerly boundary of Kaiona Beach Park and including the waters surrounding Manana and Kaohikaipu Islands.

Kaneohe Bay.

Kahana Bay.

Waialua Bay, from Puaena Point to Kaiaka Point.

The near shore waters along Kaena Point for a distance of 3 1/2 miles towards Mokuleia and 3 1/2 miles towards Makua.

That portion of West Loch, Pearl Harbor, lying north of a tangent drawn from Nichols Point to Loch Point.

Hanauma Bay

(b) Class A waters

That portion of Waimanalo Bay not designated Class AA.

Kailua Bay, from Wailea Point to Mokapu Point.

The near shore waters between Mokapu Point and Pyramid Rock.

The near shore waters between Makalii Point and Laie Point.

Laie Bay.

All coastal waters and non-tidal brackish and saline surface waters not included in any other class.

(c) Class B waters

Kaneohe Bay small boat harbor adjacent to Kaneohe Yacht Club.

Kaneohe Marine Corps Air Station small boat harbor and pier area.

Kewalo Basin.

Ala Wai Boat Harbor.

Pokai Bay small boat harbor.

Haleiwa small boat harbor.

Keehi Lagoon marina areas.

Heeia-Kea small boat harbor.

Campbell Estate Industrial Harbor.

Pearl Harbor - Middle Loch and East Loch and that portion of West Loch not classed as AA waters.

Honolulu Harbor.

Hickam Harbor.

Kuapa Pond marina areas.

2. Kauai

(a) Class AA waters

The near shore waters between Hikimoe Valley and Puu Poa Point, including Wainiha Bay and Hanalei Bay.

The near shore waters between the western boundary of Hoai Bay to Makahuena Point.

(b) Class A waters

All coastal waters and non-tidal brackish and saline surface waters not included in any other class.

(c) Class B waters

Wailua River small boat harbor.

Kukuiula small boat harbor.

Hanapepe Bay small boat harbor.

Kikiaola Harbor.

Nawiliwili Harbor.

Port Allen Harbor.

3. Niihau

(a) Class AA waters

The near shore waters surrounding the island of Niihau.

(b) Class A vaters

All coastal waters and non-tidal brackish and saline surface waters not included in any other class.

4. Molokai

(a) Class AA waters

The near shore waters between the westerly boundary of Haleolono Harbor and Laau Point.

The near shore waters between Lagu Point and Ilio Point and from Ilio Point to Lamaola Head.

The near shore waters from Cape Halawa to the easterly boundary of Kaunakakai Harbor.

(b) Class A waters

Halawa Bay

The near shore waters from the westerly boundary of Kaunakakai Harbor to the easterly boundary of Haleolono Harbor.

All coastal waters and non-tidal brackish and saline surface waters not included in any other class.

(c) Class B waters

Kaunakakai Harbor.

Haleolono Harbor.

Kalaeloa Harbor.

5. Lanai

(a) Class AA waters

All near shore waters not included in any other class.

(b) Class a waters

All off-shore waters and non-tidal brackish and saline surface waters not included in any other class.

Manele Bay.

(c) Class B waters

Manele Harbor.

-Kaumalapau Harbor.

6. Maui

(a) Class AA waters

The near shore waters between Nakalele Point and Waihee Point.

The near shore waters between Huelo Point and Puu Olai.

(b) Class A waters

All coastal waters and non-tidal brackish and saline surface waters not included in any other class.

(c) Class B waters

Maalaea small boat harbor.

Lahaina small boat harbor.

Kahului Harbor.

Hana Harbor.

7. Hawaii

(a) Class AA waters

The near shore waters from Leleiwi Point to Waiulaula Point.

(b) Class A waters

The near shore waters from the northern boundary of Kawaihae Harbor to the southern boundary of Mahukona Harbor.

The near shore waters from Kauilii Point to the westerly boundary of Hilo Harbor.

- All coastal waters and non-tidal brackish and saline surface waters not included in any other class.

(c) Class B waters

Honaupo Bay.

Kealakekua Bay

Keauhou Bay.

Kailua Bay.

Honokahau Bay.

Mahukona Harbor.

Hilo Harbor.

Kawaihae Harbor.

8. All Other Islands of the State

(a) Class AA waters

All near shore waters of all islands not classified in Section 5.A.1. through 7.

(b) Class A waters

All off-shore waters and non-tidal brackish and saline surface waters not included in any other class.

B. Fresh Water Areas

1. Class 1 waters

All sources of fresh surface waters on all islands whether publicly or privately owned, used for domestic, culinary, or food processing purposes.

2. Class 2 waters

All fresh surface waters included in "State waters" as defined by Chapter 37, Public Health Regulations, not included in Class 1.

Section 6. WATER QUALITY STANDARDS

A. Basic Standards Applicable to all Water Areas

All waters shall be free of substances attributable to domestic, industrial, or other controllable sources as follows:

- Materials that will settle to form objectionable sludge and bottom deposits;
- 2. Floating debris, oil, grease, scum, and other floating materials;
- 3. Substances in amounts sufficient to produce taste or odor in the water or detectable off-flavor in the flesh of fish, or in amounts sufficient to produce objectionable color, turbidity, or other conditions in the receiving waters;
- 4. High temperature, biocides, pathogenic cramisms, toxic, corrosive, or other deleterious substances at levels or combinations sufficient to be toxic or harmful to human, animal, plant or cruatic life or in amounts sufficient to interfere with any beneficial use of the water. As a minimum, evaluation by use of a 96-hour bioassay as described in the most recent edition of Standard Methods for the Examination of Water and Wastewater shall be conducted. Survival of test organisms shall not be less than that in controls which utilize appropriate experimental water;
- 5. Substances and conditions or combinations thereof in concentrations which produce undesirable aquatic life.

All vaters shall also be free from soil particles resulting from erosion on land involved in earthwork, such as the construction of public works; highways; subdivisions; recreational, commercial, or industrial developments; or the cultivation and management of agricultural lands. This standard shall be deemed met if it can be shown that the land on which the erosion occurred or is occurring is being managed in accordance with soil conservation practices acceptable to the Director, and that a comprehensive conservation program is being actively pursued, or that the discharge has received the best degree of treatment or control practicable under existing technology. The determination of compliance with the standard shall be made by the Director, consistent with the Hawaii Administrative Procedure Act and the Rules of Practice and Procedure of the Department of Health.

Not more than 1/2 uni lifference from natural conditions but not lower than 7.0 nor higher than 8.5 from other than natural causes.

1

A, B, and 1

Classes

Not less than 6.5 nor higher than 8.5.

Class 2

Nutrient Materials 3.

Applicable to:

of any Ethic Total phosphorus, not greater than 0.020 mg/1.

Class AA

Total phosphorus, not greater than 0.025 mg/1.

Class A

Total phosphorus, not greater than 0.030 mg/1.

Class B

Total phosphorus, not greater than 0.20 mg/1; except not greater than 0.05/mg/1 for waters entering lakes or reservoirs.

Classes 1 and 2

Total nitrogen, not greater than 0.10 mg/l.

Class AA

Total nitrogen, not greater than 0.15 mg/1.

Class A

Total nitrogen, not greater

Class B

than 0.20 mg/J. Dissolved Oxygen (except from

natural causes)

Applicable to:

Not less than 6.0 mg/1.

Classes AA and 1

Not less than 5.0 mg/1.

Classes A and 2

Not less than 4.5 mg/l.

Class B

Total Dissolved Solids, Salinity, and Currents

Applicable to:

No changes in channels, in basin geometry of the area, or in freshwater influx shall be made which would cause permanent changes in isohaline patterns of more than \pm 10% of naturally occurring variation or which would otherwise affect biological and sedimentiological situation. Total dissolved solids shall not be below Class AA

28,000 mg/1 from other than natural causes.

6. Temperature

Temperature of receiving waters shall not change more than 1.5° from natural conditions.

Applicable to:

Classes AA, A,

B, 1, and 2

Applicable to:

Classes AA,

A, B, 1, and 2

7. Turbidity

Secchi disc or secchi disc equivalent as "extinction coefficient" determinations shall not be altered from natural conditions more than 5% for Class AA or Class 1 waters, 10% for Class A or Class 2 waters, or 20% for Class B waters.

8. Radionuclides

Applicable to:

Classes AA, A,

B, 1, and 2

Concentrations of radioactive materials shall not exceed minimum concentrations which are feasible to achieve. In no case shall such material exceed the limits established in the 1962 Public Health Service Drinking Water Standards (or later amendments) or 1/30th of the MPCw values given for continuous occupational exposure in the National Bureau of Standards Handbook No. 69. The concentrations in water shall not result in accumulation of radioactivity in plants or animals that result in a hazard to humans or harm to aquatic life.

The concentration of radioactive materials present in fresh, estuarine, and marine waters shall be less than those that would require restrictions on the use of organisms harvested from the area in order to meet the Radiation Protection Guides recommended by the Federal Radiation Council.

Classes AA, A,

B, and 2

Analyses to determine water quality shall be based on the U.S. Environmental Protection Agency manual entitled "Methods for Chemical Analysis of Water and Wastes," as revised, and "Biological Methods for Measuring the Quality of Water and Wastes," as revised, or as otherwise previously specified or approved by the Director.

These water quality criteria are based upon the best currently available data. It is possible that studies planned to be made in connection with the implementation program may prove them to be either inadequate or unattainable. For this reason, they will be subject to periodic review and, where necessary, to change. Any change will be made only after public hearing, held in compliance with the Hawaii Administrative Procedure Act and the Rules of Practice and Procedure of the Department of Health.

Section 7. ESTABLISHMENT, RENEWAL, AND TERMINATION OF ZONES OF MIXING

A. Every application for a zone of mixing shall be made on forms furnished by the Director and shall be accompanied by a complete and detailed description of present conditions, how present conditions do not conform to standards, and such other information as the Director may prescribe by rules and regulations.

- B. Each application for a zone of mixing shall be reviewed in light of the descriptions, statements, plans, histories, and other supporting information as may be submitted upon the request of the Director, and the effect or probable effect upon the water quality standards established pursuant to this Chapter.
- C. Whenever an application is approved, the Director shall establish the zone of mixing taking into account protected uses of the body of water, existing natural conditions of the receiving water, character of the effluent, and the adequacy of the design of the outfall and diffuser system to achieve maximum dispersion and assimilation of the treated or controlled waste with a minimum of undesirable or noticeable effect on the receiving water.
- D. Approval of a zone of mixing shall be made only after a public hearing is held by the Director in the county where the source is situated in accordance with the Hawaii Administrative Procedure Act and the Rules of Practice and Procedure of the Department of Health.
- B. No zone of mixing shall be granted by the Director unless the application and the supporting information clearly show that:
 - The continuation of the function or operation involved in the discharge by the granting of the zone of mixing is in the public interest; and
 - 2. The discharge occurring or proposed to occur does not substantially endanger human health or safety; and
 - 3. Compliance with the existing water quality standards from which a zone of mixing is sought would produce serious hardships without equal or greater benefits to the public; and
 - 4. The discharge occurring or proposed to occur does not violate the basic standards applicable to all waters, will not unreasonably interfere with any actual or probable use of the water areas for which it is classified, and has received the best degree of treatment or control practicable under existing technology or, in the case of the proposed discharge, will receive the best available demonstrated pollution control technology, processes and operating methods.
- F. Any zone of mixing or renewal thereof shall be granted within the requirements of this section and for time periods and under conditions consistent with the reasons therefore and within the following limitations:
 - 1. If the zone of mixing is granted on the ground that there is no practicable means known or available

for the adequate prevention, ontrol, or abatement of the discharge involved, it shall be only until the necessary means for prevention, control, or abatement become practicable and subject to the taking of any substitute or alternate measures that the Director may prescribe. No renewal of a zone of mixing granted under this subsection shall be allowed without a thorough review of known and available means of preventing, controlling, or abating the discharge involved.

- 2. The Director may issue a zone of mixing for a period not exceeding five years.
- 3. Every zone of mixing granted under this section shall include, but not limited to, conditions requiring the grantee to perform effluent and receiving water sampling and report the results of each sampling to the Director, and a program of research to develop practicable alternatives to the methods of treatment or control in use by the grantee may be required if such research is deemed prudent by the Director.
- G. Any zone of mixing granted pursuant to this section may be renewed from time to time on terms and conditions and for periods not exceeding five years which would be appropriate on initial granting of a zone of mixing; provided that the applicant for renewal had met all of the conditions specified in the immediately preceding zone of mixing; and provided further, that the renewal, and the zone of mixing established in pursuance thereof, shall provide for discharge not greater in quantity of mass emissions than that attained pursuant to the terms of the immediately preceding zone of mixing at its expiration. No renewal shall be granted except on application therefore. Any such application shall be made at least sixty days prior to the expiration of the zone of mixing.
- H. No zone of mixing granted pursuant to this part shall be construed to prevent or limit the application of any emergency provisions and procedures provided by law.
- The establishment of any zone of mixing shall be subject to the concurrence of the U.S. Environmental Protection Agency.
- The Director, on his own motion, or upon the application of any person, shall terminate a zone of mixing, if after a hearing, he shall determine that the water area does not meet the basic standards applicable to all water areas or that the zone of mixing granted will unreasonably interfere with any actual or probable use of the water area or that the discharge does not receive the best degree of treatment • or control practicable under existing technology or that the new discharge did not receive the best available demonstrated pollution control technology, processes, and operating methods. Such termination shall be made only after a hearing held by the Director on the island where the area is situated in accordance with the Hawaii Administrative Procedure Act and the Rules of Practice and Procedure of the Department of Health. Upon such termination the standards of water quality applicable thereto shall be those established for the water as otherwise classified.

K. Upon expiration of the period stated in the designation, the zone of mixing shall automatically terminate and no rights shall become vested in the designee.

Section 8. SEVERABILITY

If any provision of this Chapter, or its application to any person or circumstance, ds.held invalidable application of such provision to other persons or circumstances, and the remainder of this Chapter, shall not be affected thereby.

Section 9. EFFECTIVE DATE

This Chapter shall be effective 60 days after approval by the Governor.

I, Walter B. Quisenberry, M.D., Director of Health, State of Hawaii, hereby certify that the foregoing regulations were adopted by the Department of Health on the 2nd day of November , 1973.

WALTER B. QUISENBERRY, M.D.

Director of Health

The foregoing regulations are hereby approved as to form this 25 m day of <u>Julium</u>, 1974.

JAMES A. KAWACHIKA Deputy Attorney General

The foregoing regulations are hereby approved this 6th day of March , 1974.

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B. Specific Standards Applicable to Particular Water Areas

1. Microbiological Requirements

Applicable to:

The median coliform bacteria shall not exceed 70 per 100 ml during any 30-day period nor shall samples.

Class AA

The median coliform bacteria shall not exceed 1000 per 100 ml, nor shall more than 10% of the samples exceed 2,400 per 100 ml during any 30-day period.

exceed 230 per 100 ml at any time.

Classes A,

Fecal coliform content shall not exceed an arithmetic average of 200 per 100 ml during any 30-day period nor shall more than 10% of the samples exceed 400 per 100 ml in the same time period. For such portion of Class 1 waters from which water is withdrawn for distribution for drinking water or food processing following simple chlorination, the fecal coliform content shall not exceed an arithmetic average of 20 per 100 ml during any calendar month.

Fecal coliform content shall not exceed an arithmetic average of 400 per 100 ml during any 30-day period nor shall more than 10% of the samples exceed 1000 per 100 ml in the same time period.

To determine compliance with the above microbiological requirements where a "30-day period" is specified, a minimum of ten samples shall be collected.

2. pH -- Units

Applicable to:

Class B

Not more than 1/2 unit difference from natural conditions but not lower than 8.0 nor higher than 8.5 from other than natural causes. (Not lower than 7.0 for fresh tidal waters.)

Class AA

These amendments to Chapter 37-A, Water Quality Standards of the State Public Health Regulations were adopted on October 29, 1973, following public hearings held on July 30, 1973, July 31, 1973, August 2, 1973, and August 3, 1973, after public notice was published in the Honolulu Advertiser and the Honolulu Star Bulletin on July 2, 1973.

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Filed in Lt. Governor's Office: March 6, 1974

Notice of Approval Published in the Honolulu Advertiser and Honolulu

Star Bulletin on March 26, 1974

Effective date:

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JOHN A. BURNS GOVERNOR OF HAWAH

STATE OF HAWAII DEPARTMENT OF HEALTH

HONOLULU, HAWAII 96801

April 9, 1974

WALTER B. QUISENBERRY, M.P.H., M.D. DIRECTOR OF HEALTH

WILBUR S. LUMMIS JR., M.S., M.D. DEPUTY DIRECTOR OF HEALTH

RALPH B. BERRY, M.P.H., M.D. DEPUTY DIRECTOR OF HEALTH

HENRI P. MINETTE, M.P.H., DR.P.H. DEPUTY DIRECTOR OF HEALTH

In reply, please refer to File: EPHS-PTR

Mr. Paul DeFalco, Jr. Regional Administrator U.S. Environmental Protection Agency Region IX 100 California Street San Francisco, CA 94111

Dear Mr. DeFalco:

The enclosed new regulations, Chapter 37, Water Pollution Control and Chapter 37-A, Water Quality Standards, have been approved by the Governor and will become effective on May 25, 1974. The said regulations were promulgated pursuant to Sections 303 and 402 of Public Law 92-500.

Your review and approval of the enclosed public health regulations will be appreciated.

Very sincerely,

Parter B. Quisenberry WALTER B. QUISENBERRY, M.D.

Director of Health

Enclosure

Region IX
100 California Street
San Francisco, California 94111

MAY 1 4 1974

Acting Governor of Hawaii

Executive Chambers

Honolulu HI 96813

Dear Governor Ariyoshi:

I am pleased to inform you that I have approved the revisions to the Water Quality Standards for the State of Hawaii transmitted by Dr. Quisenberry's letter of April 9, 1974. This approval is based upon my determination that the standards are consistent with the protection of the public health and welfare, the enhancement of the quality of the water, and the purposes of the Federal Water Pollution Control Act, as amended. The approved standards consist of Chapter 37-A, Water Quality Standards, and Chapter 37, Water Pollution Control, Sections 1 and 2. These standards, together with the revised implementation plan as approved by my letter of September 26, 1972, now constitute the water quality standards applicable under the Pederal Water Pollution Control Act, as amended.

It should be noted, however, that approval of these standards does not necessarily imply EPA concurrence with zones of mixing that have been established under any previous versions of Chapter 37-A of your public health regulations.

I would like to commend your Department of Health for a fine job of standards setting and for their excellent cooperation in working with the Environmental Protection Agency in developing and revising the State's standards. The standards are good ones and will prove to be of great value in conserving the present high quality of these waters for future generations.

CONCURRENCES

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It is evident that our waste treatment and water pollution control technology will advance in the future. Knowledge and understanding of water quality requirements for water uses will improve, and the collection of water quality data will make more information available to assure more accurate assignment of water quality criteria. As this new knowledge becomes available we will further expect to cooperate with Hawaii in making necessary amendments to the standards that have been theretofore approved. It will be our pleasure to continue to work together to protect, upgrade and enhance the quality of Hawaii's water.

Sincerely,

Original signed by Paul De Falco, IX.

Paul De Falco, Jr. Regional Administrator

bc: Dr. Walter G. Quisenberry,
Hawaii State Dept. of Health
Dr. Henri Minette
Hawaii State Dept. of Health
Dr. Richard Marland
Office of the Governor, HI
Mel Koizumi, EPA, HI
Bill Fox, WQS, EPA, Wn.D.C.

Reading File Suspense File PWoods:led 5/1/74

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